Towards the City of the Future

The OMY Environmental Vision



A Vision of a Vibrant and Lively City for 1,000 Years and More

We bring to you our vision, a model for a symbiotic sustainable city.

As everyday people have gone about their daily activities of thinking, working, creating, transporting and using, the economy has developed to support these activities and lifestyles have become ever-more rich and vibrant. But can we, the cities we live in and the Earth, continue to maintain this pace of development into the future?

In Japan, as in many developed nations, society has passed the phase of volatile expansion and has now reached a more mature, settled phase. As society has changed, so have our lifestyles adjusted to match, and so too have our expectations of companies and corporations.

The Otemachi-Marunouchi-Yurakucho (OMY) District is home to the Head Offices of many of the major corporations that have provided the basis for Japan's economic development. While continuing in this role as economic leaders, it is now time for corporations to also assume a new role as we approach a new era of sustainability.

In order to meet this era, we have asked ourselves the question "In order to provide a vibrant environment for work and life, 1,000 years and more into the future, what kind of city do we need to build today?" Each city, while absorbing the footprints of everyday people going about their daily business creates in itself a "City Memory," which it conveys to future generations. It is with this in mind that we, while maintaining respect and care for the footprints of days gone by, wish to create a model for a city that will survive even into the distant future.

The most pressing issue facing Japan and the world right now is clear: society cannot continue with business-as-usual as we know it. As the location of the Head Offices of numerous major global corporations, the OMY District, and the actions of the companies and the people who work here, have an impact on a global scale. In addition, almost all its food and energy and human resources are sourced from outside the district, therefore OMY indeed has a major responsibility for sustainability to the general public, not only in Japan, but also worldwide.

It is here that OMY is determined to take the lead and create a model for Asia and the world, of a business center that combines economy and the environment in a new type of city. We believe that in doing so, people from around the globe will gather here and the effects will spread like a ripple in a pond to create a wave of change that washes across the planet. We believe that it is our responsibility to lead that change.

In order to achieve this, we have created the OMY Environmental Vision, our vision for the City of the Future.



History of the OMY District

While looking to create a model for the City of the Future, we must take into account the "City Memory" of OMY and the history of the district.

The Edo Period (1603 – 1867)

What was once a sleepy fishing village situated on the Hibiya Inlet, transformed itself at the start of the Edo Period, some 400 years ago, into the world's largest city, both in terms of population and economic activity, rivaling even Paris and London. With its network of waterways and the harmony of environment and people, it is said that Tokyo—or Edo as it was known then—was a model for environmentally friendly cities.

Meiji – Taisho Periods (1868 – 1922)

With the arrival of the Meiji Restoration in 1868, the OMY District, with the houses for leading Daimyo—the military rulers of Japan—and their retinues, was converted into a government and military center. Marunouchi became the focus of a plan to create a center for commerce in Japan. Leading Japan's westernization movement, it underwent a transformation as modern-era office buildings such as the London Block—an approximately 100-meter stretch of red-brick buildings—were constructed.



Map of the Edo region, 1653



The "London Block," circa 1909



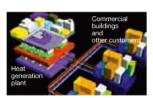
Tokyo Station in the Showa Period, 1924



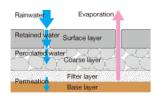
The Otemachi-Marunouchi-Yurakucho (OMY) District today

Showa – Heisei Periods (1922 – 1989)

Following on from the days of the red-brick buildings, OMY continued to develop both pre- and post-war as the business center of Japan, leading Japan's explosive economic growth during this time. Eventually, with the progress of globalization, OMY became the center for multiple major corporations, and a world leader on the global economic stage. As calls became stronger for a development framework for OMY that took into account both the environment and public spaces, corporations and government joined together with local citizens and the OMY community gradually took shape.



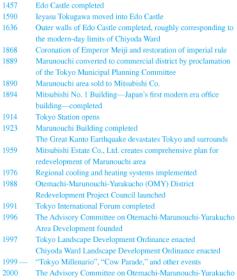
The OMY District implemented regional cooling and heating systems over 30 years



Road surfaces that mitigate the city's heat island effect



Participants in the "Uchimizu Project," designed to mitigate the city's heat island effect



History of the OMY District



A Vision of the Future

This is the OMY Environmental Vision - a model symbiotic and sustainable city, a vision for the future grounded in the past.

A City That Changes With Knowledge

OMY is at the forefront of cutting-edge information technology when it comes to energy conservation and reducing resource use. In addition, we recognize that the most important things when it comes to environmental measures are people, knowledge and action. Therefore, we are working to increase the speed of our response to environmental issues by increasing the awareness and willingness to act of businesses, employees and visitors in the area.

A City That Looks After Its Health

With Information & Communication
Technology (ICT) systems acting like a central nervous system, the city can monitor local weather conditions and energy use throughout the district. In this way we can raise awareness and stimulate a willingness to act on the behalf of the inhabitants of the area.

A Community That Acts Together to Address Global Issues A City That Pla Importance on Living Things

With 100 years of experience in advanced city development to build on, OMY has created one of its strongest assets, a well-developed community. In addition to the obvious Corporate Social Responsibility activities undertaken by individual businesses in the area, OMY also carries out its own unique brand of "Community" Social Responsibility.

A City That Places Great A City The Importance on Nature and Hope Living Things

A number of rivers flow through the OMY
District into Tokyo Bay. From the upper
reaches of the rivers to down stream, flows a
vast web of life. OMY places great importance
on nature and aims to provide a natural
environment where birds, insects and other life
can thrive and grow.

A City That Spreads Ripples of Hope

The head offices of many major global corporations are located in OMY, and decisions made here have ripple effects across the planet.

Because of this, we are working hard to make sure that proactive, positive decisions are made here for sustainability and the global environment, and these are conveyed into positive actions that spread around the world.

OMY has a responsibility to be a leader not only in Japan but across the world in sustainability fields such as energy and for and in support for everyday working lives recognize the impacts of our decisions on regions and will act to make a positive impositive actions that spread around the world.

A City That Fulfils Its Responsibility to Other Regions

OMY has a responsibility to be a leader not only in Japan but across the world in sustainability fields such as energy and food, and in support for everyday working lives. We recognize the impacts of our decisions on other regions and will act to make a positive impact.

technologies and facilities of a city. We aim to build a city that is equipped with a flexible social infrastructure that is able to take advantage of the time. In particular, we will introduce a unitized system that is able to take advantage of the latest "Top Runner"* technologies by flexibly selecting, introducing and reshuffling facilities as needed.

* Top Runner technologies refer to Japan's Top Runner standards for leading technologies in the fields of energy conservation, CO₂ emission reductions and other environmental criteria

A City That Adapts to the Times

As times change, so too do the essential

A City Where Everybody Can Live in Safety and Comfort

With solid risk management, we aim to create a social infrastructure that has been built to withstand disasters such as earthquakes, flooding and terrorism without collapsing. In addition, we envision the facilities that make up this infrastructure being used as social amenities and spaces or for logistics functions when not required for emergencies.



Roadmap for the Future

Here, we outline the details of the path we will take to achieve the objectives of the OMY Environmental vision.

Sensing, Storage and Application of Environmental Data

- We will accumulate environment-related data from buildings and other facilities in the OMY District for analysis and evaluation
- 2 In addition to making use of the data for environmental management, we will use the results to increase the environmental awareness of people in the area and stimulate a willingness to act
- 3 Having established the "Ecozzeria" as a base for environmental activities, it will be managed by the OMY Committee for Promotion of Symbiotic, Environmentally Friendly City Development*2
- 4 We will provide regular updates on the "health" of OMY with environmental information from the Ecozzeria
- *1 The Ecozzeria is an environmental space located on the 10th floor of the Shin-Marunouchi building
- *2 An organization founded specifically to manage the Ecozzeria, promote the development of environmental technologies and support local and community environmental activities

Activities and Information That Extend Beyond OMY

- 1 We will provide a showcase in OMY for the latest environmental technologies and activities 2. We will share this information and these
- We will share this information and these technologies with the world through the Ecozzeria and at academic conferences and other events.
- 3 In addition to celebrating Environment Month annually in June and running environmental events for visitors to the district, we will publish an annual Environmental Report
- 4 OMY will work to be self-subsistent in terms

of energy and food for workers and residents in the district, and provide support for other regions in Japan and overseas through the sharing of cutting-edge technologies and other measures

Construction of an Environmental and Energy Management System

- 1 We will research ways of using energy more efficiently by collecting energy usage data in cooperation with residents and businesses in the area
- 2 We will expand the existing energy management network in the OMY District to make optimal use of energy and heat output
- 3 Working with energy- and heat-generation businesses, OMY will seek to make optimum use of water and ice storage and cogeneration, as well as promote the introduction of biomass, wind and solar power and heating systems
- 4 In the future, OMY will seek to become a completely carbon neutral city, such that activities within the district will have a zero net effect on the carbon balance.

Creation of New Transport and Logistics Systems With Low Environmental Impacts

- We will undertake studies on the current levels of optimization of OMY's transport and logistics systems
- 2 We will encourage walking and the use of bicycles for visitors and employees in the district
- 3 In cooperation with local government, OMY will lay the foundations for low-impact transport and logistics systems by creating

infrastructure such as walking spaces, bicycle lanes, transit malls^{*3} and bicycle parking, and providing shared bicycle facilities, in addition to conducting research into and trials of biogasoline cars and other green technologies

*3 Open access roads for pedestrians, bicycles and shared transportation

Revitalizing the "Water City" With Bioregion Drainage Systems

- 1 In cooperation with wastewater and river management organizations, we will research and promote the establishment of wastewater and river infrastructures using groundwater, wastewater, rainwater and well water
- 2 We will investigate the uses for biomass byproducts of wastewater treatment plants
- 3 OMY will seek to mitigate the city heat island effect with laws and regulations by implementing programs such as the Uchimizu Program and velotaxis (bicycle taxis)
- We will carry out integrated water resource management based on analytical research into the drainage systems and ecosystems in the OMY District
- 5 With these and other initiatives, we will return the area to the famed "Water City" of the Edo Period, with extensive water networks and waterscapes

Systematic Use of Outdoor and Public Spaces

OMY will foster cooperation between land owners and local government to make optimal use of outdoor and public spaces, such as roofs, exterior walls, roads and vacant public land

- We will supply the OMY District with renewable energy from solar panels
- We will introduce highly reflective coatings for buildings and other surfaces to reduce heat absorption
- OMY will work to improve the local climate with the use of absorbent road surfaces and dry mist systems*4
- With tree planting programs and biotope management, we will seek to preserve biodiversity in the district
- We will research open spaces that take into account local wind patterns

*4 Dry mist systems use evaporation and heat absorption of artifical mist to create a more pleasant environment

Multistage Waste Reuse System

- 1 We will work with land owners, tenants, local government and waste disposal organizations to improve the district's waste disposal system and reduce energy used for waste disposal
- 2 We will conduct research into the establishment of compact, highly efficient biomass processing systems and plants for disposal of organic waste
- 3 OMY will ensure that construction waste from demolished buildings and other facilities will be reused and recycled wherever possible
- 4 In order to ensure long service lives for new buildings and facilities, we will work to reduce the use of wood materials in the future

Mitigating Environmental Impacts From and Reducing Vulnerability To Major Disasters

- 1 When major disasters occur, the consequent rebuilding can take a heavy toll in terms of environmental impact. In order to reduce this impact, new buildings will be constructed to withstand these kinds of disasters.
- 2 We will reduce vulnerability by creating robust energy and water systems that can continue to provide essential services even in the face of major disasters

Creating and Developing New Environmental Businesses

- In order to ensure voluntary participation by land owners, tenants, local government, employees and visitors in OMY, we shall investigate an incentives scheme for the reduction of environmental impacts
- 2 Through reasonable evaluation and assessment, we will create and develop new environment-related businesses

Making the Vision a Reality

We do not envision that each of these initiatives will be carried out independently, rather we see measures being taken that stretch across fields of application and promote interlinked development. Furthermore, in order for these initiatives to succeed, we will be relying on the willing cooperation. of all involved parties; and owners, building owners, tenants, employees, visitors, the nation, Tokyo City, Chiyoda Ward, energy suppliers, the Otemachi-Marunouehi-Yurakucho (OMY) District Redevelopment Project Council, the OMY Committee for Promotion of Symbiotic, Environmentally Friendly City Development, and a host of other stakeholders will be working together to ensure that the OMY Environmental Vision becomes reality.





About the OMY Environmental Vision

This booklet, first published in May 2007, outlines the Otemachi-Marunouchi-Yurakucho (OMY) Environmental Vision. The vision details plans for a symbiotic, sustainable city development model and the revitalization of the OMY District. In the booklet, we discuss the history of the OMY District, a variety of information systems, the status of current environmental measures and the future activities of the OMY community. For further details regarding the OMY Environmental Vision, please feel free to contact us at any of the below contact points.



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Non Volatile Organic Compounds

